

Notice of Allowability

Application No.

10/672,719

Examiner

James M McAleenan

Applicant(s)

LAWLOR ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's Terminal Disclaimer & Telephone Interview.
2. ☒ The allowed claim(s) is/are 1-70.
3. ☒ The drawings filed on 25 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 9/25/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 12/1/2004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S COMMENT

1. Examiner acknowledges the telephone interview with Applicant on 11/15/2004.
2. Examiner acknowledges and has signed Applicant's filed IDS (9/25/2003).
3. Examiner acknowledges Applicant's filed Terminal Disclaimer on 11/29/2004. The Terminal Disclaimer was file by Applicant as a result of the telephone interview on 11/15/2004.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CAR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. R. reams Goodloe, Jr. (32,466)(253-859-9128) on December 1, 2004.

The application has been amended as follows:

IN THE CLAIMS:

In claim 5, line 1, "or in claim 2, or claim 4" has been deleted.

The above change to claim 5 has been made to correct a multiple dependency problem in the claims.

REASONS FOR ALLOWANCE

5. The following is an examiner's statement of reasons for allowance:

The instant invention is directed to an unobvious improvement over Lawlor (U.S. Patent Number 5,709,076). Lawlor discloses a gas compressor having an inlet (119) (see Figure 8 and Col. 5, lines 60-65) for supply of gas to be compressed (see Figure 8 and Col. 5, lines 37-65). Lawlor

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discloses a rotor (102) (see Figure 8 and Col. 5, lines 37-47) having a central axis adapted for rotary motion thereabout, wherein the rotor extends radially outward from the central axis to an outer surface portion having an outer extremity (see Figure 8 and Col. 5, lines 48-67). Lawlor discloses ramps forming features on the outer surface portion of the rotor. Lawlor discloses the ramps having lateral edges (120) for the first ramp, opposing leading edge inlet structures (130), inlet structure ramp surfaces (132) and an outboard side (134). The improvement comprises of the combination of: 1) a gas compressor having one or more strakes being provided adjacent to one or more of the supersonic compression ramps, wherein at least a portion of the one or more strakes extend outward from a portion of the outer surface portion of the rotor to a point adjacent to the interior surface portion of the peripheral wall; 2) whereby the one or more strakes effectively separate the inlet gas from the compressed gas downstream of each of the supersonic compression ramps. Regarding claim 24, the improvement comprises of the combination of: 1) a gas compressor being adapted to utilize at least a portion of the inner side surface of the first circumferential housing to compress the inlet gas there against, wherein the rotor has one or more strakes; 2) wherein the one or more strakes on the first rotor provided on each of the one or more gas compression ramps extend outward from at least portion of circumferential portion of the first rotor to a point adjacent to the inner side surface of the first circumferential housing. Regarding claim 56, the improvement comprises of the combination of: 1. a gas compressor compressing an inlet gas stream between one or more compression ramps and the stationary housing to generate a high pressure gas therefrom, whereby effectively separating the inlet gas from the high pressure by using one or more strakes along the periphery of the rotor; (2) wherein the one or more strakes are adjacent to the one or more gas compression ramps have at least a

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portion of each of the one or more strakes extending outward from at least a portion of an outer surface portion of the rotor to a point adjacent to the inner surface of the stationary housing.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee, and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "comments on Statement of Reasons for allowance."

PRIOR ART

6. No prior art is made of record.

CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M McAleenan whose telephone number is 703-308-2827. The examiner can normally be reached on M-F 8:30-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 703-308-1044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. M. McAleenan 12/1/04

James M. McAleenan
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703-308-2827

Ed Look
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12/9/04